



Test Report: ELG-100U-42

100W Constant Voltage+Constant Current LED Driver

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

Component Stress Test

■ SAFETY & E.M.C. TEST

Safety Test

E.M.C. Test

■ RELIABILITY TEST

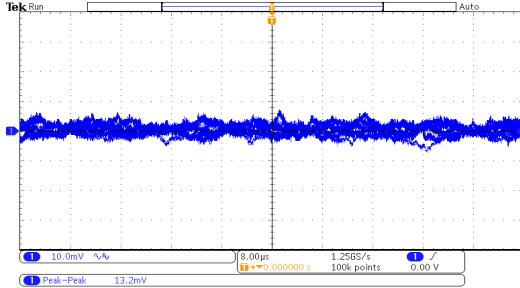
Environment Test

DESIGN VERIFY TEST

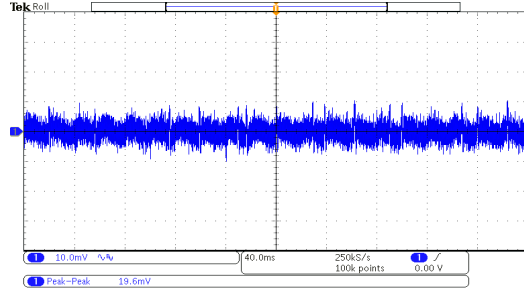
OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	CONSTANT CURRENT REGION	21V~42V	I/P: 230VAC O/P: LED MODE Ta: 25°C	8.4V~42V
2	OUTPUT VOLTAGE ADJUST RANGE (For A-Type only)	37.8V~46.2V	I/P: 230VAC O/P: NO LOAD Ta: 25°C	36.01V~47.84V
3	OUTPUT CURRENT ADJUST RANGE (For A-Type only)	1.14A~2.28A (For A-Type only)	I/P: 230VAC O/P: SETTING Ta: 25°C	0.956A~2.699A
4	OUTPUT VOLTAGE TOLERANCE	-2.5%~+2.5%	I/P: 100VAC / 305VAC O/P: FULL/ NO LOAD Ta: 25°C	-0.12%~0.20%
5	LINE REGULATION	-0.5%~+0.5%	I/P: 100VAC ~ 305VAC O/P: FULL LOAD Ta: 25°C	-0.12%~0.14%
6	LOAD REGULATION	-0.5%~+0.5%	I/P: 230VAC O/P: FULL ~NO LOAD Ta: 25°C	-0.07%~0.14%
7	OVER/UNDERSHOOT TEST	$\pm 5\%$	I/P: 230VAC O/P: FULL LOAD Ta: 25°C	$\pm 0.45\%$
8	RIPPLE & NOISE (Max)	250mVp-p	I/P: 230VAC O/P: FULL LOAD Ta: 25°C	19.6mVp-p

high frequency :



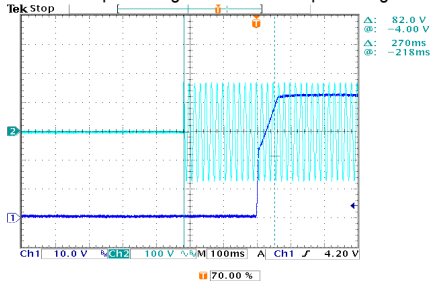
low frequency :



9	SET UP TIME(Max)	120VAC/ 1000ms 230VAC/ 500ms	I/P: 120 VAC I/P: 230 VAC O/P: FULL LOAD Ta: 25°C	120VAC/ 270ms 230VAC/ 274ms
---	------------------	---------------------------------	--	--------------------------------

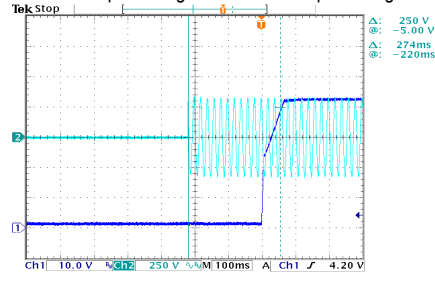
INPUT=120VAC/50HZ @ FULL LOAD

CH1: Output Voltage CH2: AC Input Voltage



INPUT=230VAC/50HZ @ FULL LOAD

CH1: Output Voltage CH2: AC Input Voltage

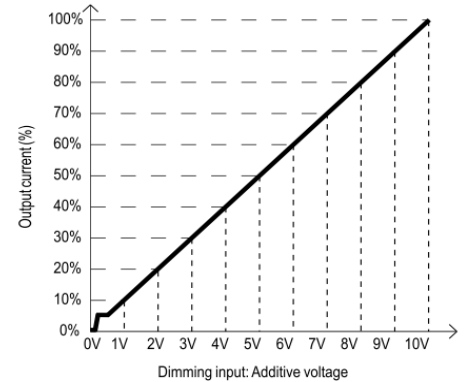
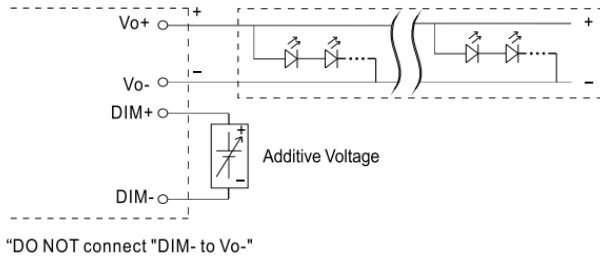


<p>10</p> <p>RISE TIME (Max)</p>	<p>120VAC/ 80ms 230VAC/ 100ms</p>	<p>I/P: 120 VAC I/P: 230 VAC O/P: FULL LOAD Ta: 25°C</p>	<p>120VAC/ 50.0 ms 230VAC/ 52.0 ms</p>
<p>INPUT=120VAC/50HZ @ FULL LOAD</p> <p>CH1: Output Voltage</p>		<p>INPUT=230VAC/50HZ @ FULL LOAD</p> <p>CH1: Output Voltage</p>	
<p>11</p> <p>HOLD UP TIME(Typ)</p>	<p>120VAC/ 15ms 230VAC/ 10ms</p>	<p>I/P: 120 VAC I/P: 230 VAC O/P: FULL LOAD Ta: 25°C</p>	<p>120VAC/ 20.8 ms 230VAC/ 33.2 ms</p>
<p>INPUT=120VAC/50HZ @ FULL LOAD</p> <p>CH1: Output Voltage CH2: AC Input Voltage</p>		<p>INPUT=230VAC/50HZ @ FULL LOAD</p> <p>CH1: Output Voltage CH2: AC Input Voltage</p>	
<p>12</p> <p>DYNAMIC LOAD</p>	<p>V1: 4200 mVp-p</p>	<p>I/P: 230VAC O/P: (1)FULL /50% LOAD 50%DUTY / 120HZ (2)FULL /50% LOAD 50%DUTY / 1KHZ Ta: 25°C</p>	<p>(1) 262mVp-p (2) 238mVp-p</p>
<p>FULL /50% LOAD 50%DUTY / 120HZ</p>		<p>FULL /50% LOAD 50%DUTY / 1KHZ</p>	

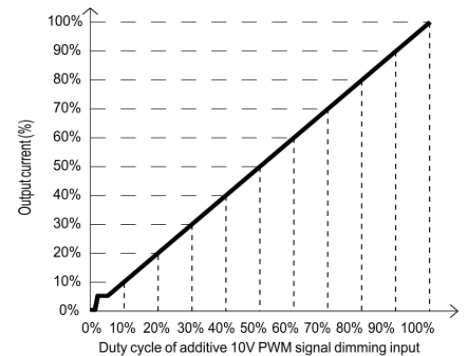
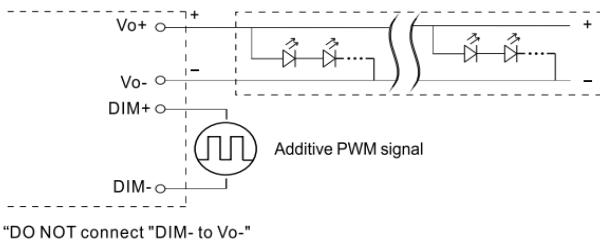
13 DIMMING TEST
(For B-Type only)

•Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-:
 0 ~ 10Vdc, or 10V PWM signal or resistance.
 •Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers.
 •Dimming source current from power supply: 100uA (typ.)

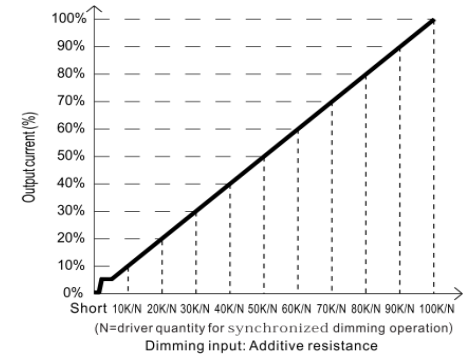
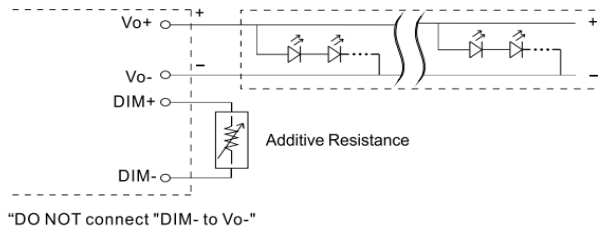
⊙ Applying additive 0 ~ 10VDC



⊙ Applying additive 10V PWM signal (frequency range 100Hz ~ 3KHz):



⊙ Applying additive resistance:



Note : 1. Min. dimming level is about 8% and the output current is not defined when 0% < Iout < 8%.
 2. The output current could drop down to 0% when dimming input is about 0kΩ or 0Vdc, or 10V PWM signal with 0% duty cycle.

I/P: 230 VAC
 O/P: DIMMING TEST
 Ta: 25°C

	R	0K	10K	20K	30K	40K	50K	60K	70K	80K	90K	100K	OPEN
1	Output Current	0	0.1936	0.4252	0.6552	0.8828	1.1100	1.3340	1.5612	1.7824	2.0064	2.2760	2.3000
	%	0%	8.49%	18.65%	28.74%	38.72%	48.68%	58.51%	68.47%	78.18%	88.00%	99.82%	100.88%
2	V	0V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
	Output Current	0	0.1960	0.4300	0.6500	0.8860	1.1152	1.3524	1.5864	1.8076	2.0436	2.2543	2.2912
	%	0%	8.60%	18.86%	28.51%	38.86%	48.91%	59.32%	69.58%	79.28%	89.63%	98.87%	100.49%
3	PWM(100Hz)	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
	Output Current	0	0.1888	0.4184	0.6480	0.8776	1.1080	1.3388	1.5696	1.7980	2.0300	2.2580	2.2984
	%	0%	8.28%	18.35%	28.42%	38.49%	48.60%	58.72%	68.84%	78.86%	89.04%	99.04%	100.81%

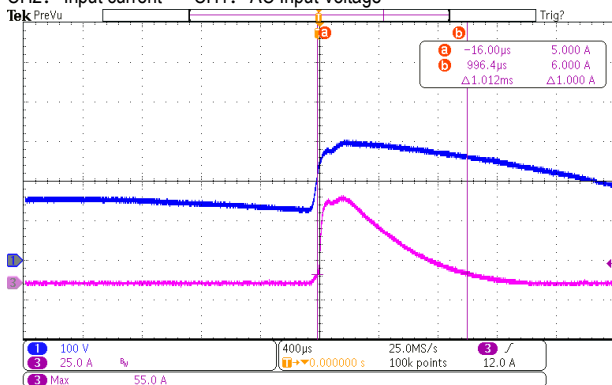
TEST RESULT: OK

INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE RANGE	100VAC~305VAC	I/P: TESTING O/P: FULL LOAD Ta: 25°C	97 V~ 305 V
			I/P: (1)LOW-LINE-3V=97 V HIGH-LINE+10V=315 V O/P: FULL/MIN LOAD ON: 30 Sec OFF: 30 Sec 10MIN (2)230VAC ON: 0.5 Sec OFF: 0.5 Sec 20MIN (POWER ON/OFF NO DAMAGE)	TEST: OK
2	INPUT FREQUENCY RANGE	47HZ ~63 HZ NO DAMAGE	I/P: 100 VAC ~305 VAC O/P: FULL~NO LOAD Ta: 25°C	TEST: OK
3	AC CURRENT	0.5A/277VAC 0.6A/230VAC 1.1A/120VAC	I/P: 277 VAC I/P: 230 VAC I/P: 120 VAC O/P: FULL LOAD Ta: 25°C	I = 0.44 A/ 277VAC I = 0.44 A/ 230VAC I = 0.85 A/ 120VAC
4	LEAKAGE CURRENT	< 0.75mA / 277VAC	I/P: 277 VAC O/P: NO LOAD Ta: 25°C	L-FG: 0.352 mA N-FG: 0.334 mA
5	NO LOAD/STANDBY POWER CONSUMPTION	< 0.5W	I/P: 230VAC O/P: NO LOAD Ta: 25°C	0.2711 W/ 230VAC
6	INRUSH CURRENT(Typ)	277VAC/ 60A Twidth =1.4ms measured at 10% Ipeak, Twidth =620us measured at 50% Ipeak, COLD START	I/P: 277 VAC O/P: FULL LOAD Ta: 25°C	I = 55 A/ 277VAC Twidth =996 us/10% Ipeak Twidth =504 us/50% Ipeak

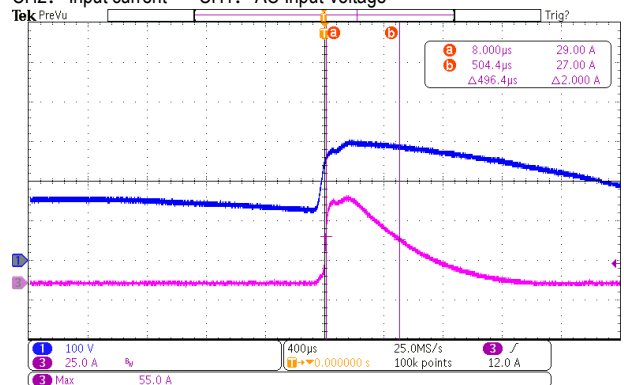
INPUT=277VAC/50HZ @ FULL LOAD

CH2: Input current CH1: AC Input Voltage



INPUT=277VAC/50HZ @ FULL LOAD

CH2: Input current CH1: AC Input Voltage



7	EFFICIENCY(Typ)	90%	I/P: 230VAC O/P: FULL LOAD Ta: 25°C	90.71 %																												
<p>EFFICIENCY vs LOAD</p> <table border="1"> <caption>Efficiency vs Load Data</caption> <thead> <tr> <th>LOAD (%)</th> <th>277V (%)</th> <th>230V (%)</th> <th>120V (%)</th> </tr> </thead> <tbody> <tr><td>50%</td><td>89.0</td><td>89.0</td><td>89.0</td></tr> <tr><td>60%</td><td>89.5</td><td>89.8</td><td>89.0</td></tr> <tr><td>70%</td><td>90.0</td><td>90.2</td><td>89.2</td></tr> <tr><td>80%</td><td>90.5</td><td>90.5</td><td>89.0</td></tr> <tr><td>90%</td><td>90.8</td><td>90.8</td><td>88.8</td></tr> <tr><td>100%</td><td>90.8</td><td>90.8</td><td>88.5</td></tr> </tbody> </table>					LOAD (%)	277V (%)	230V (%)	120V (%)	50%	89.0	89.0	89.0	60%	89.5	89.8	89.0	70%	90.0	90.2	89.2	80%	90.5	90.5	89.0	90%	90.8	90.8	88.8	100%	90.8	90.8	88.5
LOAD (%)	277V (%)	230V (%)	120V (%)																													
50%	89.0	89.0	89.0																													
60%	89.5	89.8	89.0																													
70%	90.0	90.2	89.2																													
80%	90.5	90.5	89.0																													
90%	90.8	90.8	88.8																													
100%	90.8	90.8	88.5																													
8	POWER FACTOR	0.92/ 277VAC 0.95/ 230VAC 0.97/ 120VAC	I/P: 277 VAC I/P: 230 VAC I/P: 120 VAC O/P: FULL LOAD Ta: 25°C	PF= 0.974 / 277VAC PF= 0.980 / 230VAC PF= 0.996 / 120VAC																												
<p>P.F vs LOAD</p> <table border="1"> <caption>P.F vs Load Data</caption> <thead> <tr> <th>LOAD (%)</th> <th>277V</th> <th>230V</th> <th>120V</th> </tr> </thead> <tbody> <tr><td>50%</td><td>0.925</td><td>0.942</td><td>0.990</td></tr> <tr><td>60%</td><td>0.942</td><td>0.955</td><td>0.992</td></tr> <tr><td>70%</td><td>0.955</td><td>0.965</td><td>0.993</td></tr> <tr><td>80%</td><td>0.962</td><td>0.972</td><td>0.994</td></tr> <tr><td>90%</td><td>0.970</td><td>0.975</td><td>0.995</td></tr> <tr><td>100%</td><td>0.975</td><td>0.980</td><td>0.995</td></tr> </tbody> </table>					LOAD (%)	277V	230V	120V	50%	0.925	0.942	0.990	60%	0.942	0.955	0.992	70%	0.955	0.965	0.993	80%	0.962	0.972	0.994	90%	0.970	0.975	0.995	100%	0.975	0.980	0.995
LOAD (%)	277V	230V	120V																													
50%	0.925	0.942	0.990																													
60%	0.942	0.955	0.992																													
70%	0.955	0.965	0.993																													
80%	0.962	0.972	0.994																													
90%	0.970	0.975	0.995																													
100%	0.975	0.980	0.995																													
9	TOTAL HARMONIC DISTORTION	THD < 20% (@load ≥ 50%/120VAC, @load ≥ 60%/230VAC, @load ≥ 75%/277VAC)	I/P: 120 VAC/50% LOAD I/P: 230 VAC/60% LOAD I/P: 277 VAC/75% LOAD Ta: 25°C	THD=7.37% @50% load /120VAC THD=13.04% @60% load /230VAC THD=11.93% @75% load /277VAC																												
<p>THD vs LOAD</p> <table border="1"> <caption>THD vs Load Data</caption> <thead> <tr> <th>LOAD (%)</th> <th>277V (%)</th> <th>230V (%)</th> <th>120V (%)</th> </tr> </thead> <tbody> <tr><td>50%</td><td>16.5</td><td>14.5</td><td>7.5</td></tr> <tr><td>60%</td><td>14.5</td><td>13.0</td><td>6.5</td></tr> <tr><td>70%</td><td>12.5</td><td>11.5</td><td>5.5</td></tr> <tr><td>80%</td><td>11.0</td><td>10.5</td><td>5.0</td></tr> <tr><td>90%</td><td>10.0</td><td>9.5</td><td>4.8</td></tr> <tr><td>100%</td><td>9.0</td><td>8.5</td><td>4.8</td></tr> </tbody> </table>					LOAD (%)	277V (%)	230V (%)	120V (%)	50%	16.5	14.5	7.5	60%	14.5	13.0	6.5	70%	12.5	11.5	5.5	80%	11.0	10.5	5.0	90%	10.0	9.5	4.8	100%	9.0	8.5	4.8
LOAD (%)	277V (%)	230V (%)	120V (%)																													
50%	16.5	14.5	7.5																													
60%	14.5	13.0	6.5																													
70%	12.5	11.5	5.5																													
80%	11.0	10.5	5.0																													
90%	10.0	9.5	4.8																													
100%	9.0	8.5	4.8																													

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OVER CURRENT PROTECTION	95%~108%	I/P: 100VAC I/P: 230VAC I/P: 305VAC O/P: TESTING Ta: 25°C	100 %/ 100VAC 100 %/ 230VAC 100 %/ 305VAC Constant Current Limiting, recovers automatically after fault condition is removed
2	OVER VOLTAGE PROTECTION	47V~54V	I/P: 100VAC I/P: 230VAC I/P: 305VAC O/P: NO LOAD Ta: 25°C	49.287V/ 308VAC 49.278V/ 230VAC 49.117V/ 120VAC Shut down output voltage, re-power on to recovery
3	OVER TEMPERATURE PROTECTION	NO DAMAGE	I/P: 100VAC I/P: 230VAC I/P: 305VAC O/P: FULL LOAD	O.T.P. Active Shut down output voltage with auto-recovery or re-power on to recover
4	SHORT CIRCUIT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P: 100VAC I/P: 305VAC O/P: FULL LOAD Ta: 25°C	NO DAMAGE Hiccup mode, recovers automatically after fault condition is removed

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	PWM Power Transistor	Q 2 Rated 800V/5.7A	I/P: High-Line +3V =308V O/P: (1) Full Load Turn on (2) Output Short (3) Full load continue Ta: 25°C	(1) 696 V (2) 524 V (3) 692 V
2	O/P Diode (MOSFET)	Q101 Rated 170V/20A	I/P: High-Line +3V =308V O/P: (1) Full Load Turn on (2) Output Short (3) Full load continue Ta: 25°C	(1) 137 V (2) 94 V (3) 134 V
3	Input Capacitor	C5 Rated 100u/ 450V	I/P: High-Line +3V =308 V O/P: (1) Full Load input on/off (2) NO LOAD input on /Off (3) Full Load /NO LOAD Change Ta: 25°C	(1) 446 V (2) 448 V (3) 446 V
4	Control IC	U1 Rated 28V (MAX.)	I/P: High-Line +3V =308 V O/P: ((1) FULL LOAD (2) Output Short (3) O.L.P (4) O.V.P (5) Low Line No Load Vo(min) Ta: 25°C	(1) 17.0 V (2) 15.1 V (3) 11.2 V (4) 17.0 V (5) 17.0 V

5	PFC Power Transistor	Q 1 Rated 600V/10A	I/P: High-Line +3V =308V O/P: (1) Full Load Turn on (2) Output Short (3) Full load continue Ta: 25°C	(1) 486 V (2) 454 V (3) 483 V
---	----------------------	-----------------------	--	-------------------------------------

SAFETY TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	WITHSTAND VOLTAGE	I/P-O/P: 3.75KVAC/min I/P-FG: 2.0KVAC/min O/P-FG: 1.5KVAC/min	I/P-O/P: 4.125 KVAC/min I/P-FG: 2.4 KVAC/min O/P-FG: 1.8 KVAC/min Ta: 25°C	I/P-O/P: 2.995 mA I/P-FG: 2.820 mA O/P-FG: 2.835 mA NO DAMAGE
2	ISOLATION RESISTANCE	I/P-O/P: 500VDC>100MΩ I/P-FG: 500VDC>100MΩ O/P-FG: 500VDC>100MΩ	I/P-O/P: 500 VDC I/P-FG: 500 VDC O/P-FG: 500 VDC Ta: 25°C	I/P-O/P: >9999 MΩ I/P-FG: >9999 MΩ O/P-FG: >9999 MΩ
3	GROUNDING CONTINUITY	IEC60950-1 FG(PE) TO CHASSIS OR TRACE < 100 mΩ	40A / 2min Ta:25°C	18mΩ

E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	CONDUCTION	FCC PART 15 CLASS B	I/P: 230 VAC/50HZ O/P: FULL LOAD Ta: 25°C	PASS Test by certified Lab
2	RADIATION	FCC PART 15 CLASS B	I/P: 230 VAC/50HZ O/P: FULL LOAD Ta: 25°C	PASS Test by certified Lab
3	E.S.D	EN61000-4-2 LIGHT INDUSTRY AIR: 8KV Contact: 4KV	I/P: 230 VAC/50HZ O/P: FULL LOAD Ta: 25°C	PASS
4	E.F.T	EN61000-4-4 LIGHT INDUSTRY INPUT: 1KV	I/P: 230VAC/50HZ O/P: FULL LOAD Ta: 25°C	PASS
5	SURGE	EN61000-4-5 LIGHT INDUSTRY L-N: 1KV L,N-PE: 2KV	I/P: 230VAC/50HZ O/P: FULL LOAD Ta: 25°C	PASS
6	Test by certified Lab & Test Report Prepare			

RELIABILITY TEST

ENVIRONMENT TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT																																																																																												
1	TEMPERATURE RISE TEST	MODEL: ELG-100U-48 1. ROOM AMBIENT BURN-IN: 2 HRS I/P: 230VAC O/P: FULL LOAD Ta=27.8 °C 2. HIGH AMBIENT BURN-IN: 2 HRS I/P: 230VAC O/P: FULL LOAD Ta=59.4°C																																																																																														
				<table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>ROOM AMBIENT Ta=27.8 °C</th> <th>HIGH AMBIENT Ta=59.4 °C</th> </tr> </thead> <tbody> <tr><td>1</td><td>LF2</td><td>53.6°C</td><td>82.9°C</td></tr> <tr><td>2</td><td>L1</td><td>55.5°C</td><td>84.9°C</td></tr> <tr><td>3</td><td>L2</td><td>55.0°C</td><td>84.1°C</td></tr> <tr><td>4</td><td>ZNR2</td><td>57.7°C</td><td>86.1°C</td></tr> <tr><td>5</td><td>C11</td><td>55.3°C</td><td>84.9°C</td></tr> <tr><td>6</td><td>BD1</td><td>56.8°C</td><td>85.8°C</td></tr> <tr><td>7</td><td>Q1</td><td>55.8°C</td><td>85.6°C</td></tr> <tr><td>8</td><td>Q2</td><td>57.6°C</td><td>87.3°C</td></tr> <tr><td>9</td><td>D6</td><td>57.0°C</td><td>87.0°C</td></tr> <tr><td>10</td><td>D10</td><td>61.9°C</td><td>92.0°C</td></tr> <tr><td>11</td><td>U1</td><td>55.3°C</td><td>84.9°C</td></tr> <tr><td>12</td><td>R7</td><td>62.0°C</td><td>91.6°C</td></tr> <tr><td>13</td><td>C5</td><td>54.4°C</td><td>83.7°C</td></tr> <tr><td>14</td><td>T1</td><td>60.3°C</td><td>89.4°C</td></tr> <tr><td>15</td><td>U100</td><td>52.1°C</td><td>81.6°C</td></tr> <tr><td>16</td><td>Q101</td><td>59.8°C</td><td>89.2°C</td></tr> <tr><td>17</td><td>C205</td><td>56.3°C</td><td>85.8°C</td></tr> <tr><td>18</td><td>C105</td><td>56.9°C</td><td>86.6°C</td></tr> <tr><td>19</td><td>C106</td><td>55.9°C</td><td>85.5°C</td></tr> <tr><td>20</td><td>C108</td><td>54.1°C</td><td>83.8°C</td></tr> <tr><td>21</td><td>RTH3</td><td>54.0°C</td><td>83.3°C</td></tr> <tr><td>22</td><td>TC</td><td>49.3°C</td><td>78.5°C</td></tr> </tbody> </table>	NO	Position	ROOM AMBIENT Ta=27.8 °C	HIGH AMBIENT Ta=59.4 °C	1	LF2	53.6°C	82.9°C	2	L1	55.5°C	84.9°C	3	L2	55.0°C	84.1°C	4	ZNR2	57.7°C	86.1°C	5	C11	55.3°C	84.9°C	6	BD1	56.8°C	85.8°C	7	Q1	55.8°C	85.6°C	8	Q2	57.6°C	87.3°C	9	D6	57.0°C	87.0°C	10	D10	61.9°C	92.0°C	11	U1	55.3°C	84.9°C	12	R7	62.0°C	91.6°C	13	C5	54.4°C	83.7°C	14	T1	60.3°C	89.4°C	15	U100	52.1°C	81.6°C	16	Q101	59.8°C	89.2°C	17	C205	56.3°C	85.8°C	18	C105	56.9°C	86.6°C	19	C106	55.9°C	85.5°C	20	C108	54.1°C	83.8°C	21	RTH3	54.0°C	83.3°C	22	TC	49.3°C	78.5°C
NO	Position	ROOM AMBIENT Ta=27.8 °C	HIGH AMBIENT Ta=59.4 °C																																																																																													
1	LF2	53.6°C	82.9°C																																																																																													
2	L1	55.5°C	84.9°C																																																																																													
3	L2	55.0°C	84.1°C																																																																																													
4	ZNR2	57.7°C	86.1°C																																																																																													
5	C11	55.3°C	84.9°C																																																																																													
6	BD1	56.8°C	85.8°C																																																																																													
7	Q1	55.8°C	85.6°C																																																																																													
8	Q2	57.6°C	87.3°C																																																																																													
9	D6	57.0°C	87.0°C																																																																																													
10	D10	61.9°C	92.0°C																																																																																													
11	U1	55.3°C	84.9°C																																																																																													
12	R7	62.0°C	91.6°C																																																																																													
13	C5	54.4°C	83.7°C																																																																																													
14	T1	60.3°C	89.4°C																																																																																													
15	U100	52.1°C	81.6°C																																																																																													
16	Q101	59.8°C	89.2°C																																																																																													
17	C205	56.3°C	85.8°C																																																																																													
18	C105	56.9°C	86.6°C																																																																																													
19	C106	55.9°C	85.5°C																																																																																													
20	C108	54.1°C	83.8°C																																																																																													
21	RTH3	54.0°C	83.3°C																																																																																													
22	TC	49.3°C	78.5°C																																																																																													
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR	I/P: 305VAC/120VAC/100VAC O/P: FULL LOAD/70% LOAD Ta= -45°C / -30°C	TEST: OK																																																																																												
3	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 55°C NO DAMAGE	I/P: 305VAC O/P: FULL LOAD Ta=55°C HUMIDITY= 95 %R.H	TEST: OK																																																																																												
4	TEMPERATURE COEFFICIENT	±0.03 %/°C (0~60°C)	I/P: 230 VAC O/P: FULL LOAD	±0.002 %/°C (0~60°C)																																																																																												
5	STORAGE TEMPERATURE TEST	1. Thermal shock Temperature: -45°C~ +85°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle: 5 CYCLE 5. Input/Output condition: STATIC		TEST: OK																																																																																												



6	THERMAL SHOCK TEST	1. Thermal shock Temperature: $T_{case} = -45^{\circ}\text{C} \sim +90^{\circ}\text{C}$ 2. Temperature change rate : $25^{\circ}\text{C} / \text{MIN}$ 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle: 10 CYCLE 5. Input/Output condition: 230VAC/Full Load AC ON/OFF TEST AC on 3 sec/AC off 1 sec TEST	TEST: OK
7	VIBRATION TEST	1 Carton & 1 Set (1) Waveform: Sine Wave (2) Frequency: 10~500Hz (3) Sweep Time: 12min/sweep cycle (4) Acceleration: 5G (5) Test Time: 72min in each axis (X.Y.Z) (6) T_a : 25°C	TEST: OK
8	CAPACITOR LIFE CYCLE	ELG-100U-48: SUPPOSE C106 IS THE MOST CRITICAL COMPONENT (1) I/P: 230VAC O/P: FULL LOAD $T_c = 75^{\circ}\text{C}$ LIFE TIME (2) I/P: 230VAC O/P: 75% LOAD $T_c = 75^{\circ}\text{C}$ LIFE TIME (3) I/P: 230VAC O/P: 50% LOAD $T_c = 75^{\circ}\text{C}$ LIFE TIME	(1) 67551 HRS (2) 73517 HRS (3) 73287 HRS
9	MTBF	Conducted by Parts Stress Analysis Prediction 2877.8K hrs min. Telcordia SR-332 (Bellcore) ; 287.5K hrs min. MIL-HDBK-217F (25°C)	
10	Ongoing Reliability Test	I/P: 230VAC O/P: FULL LOAD $T_A = 50^{\circ}\text{C}$ Demonstration Mean Time Between Failure : 50,000 hours	

TEST RESULT	TESTER	REVIEW	APPROVAL
PASS	WUWQ/ZHOUB	WENF	LIUWY